REMARKS

Rejections Relying on 35 U.S.C. § 102(e)

Applicant notes that certain references used in support of rejections rely on 35 U.S.C. § 102(e). In responding to the rejections, Applicant does not admit that the references are prior art and Applicant specifically reserves the right to swear behind these references at a future date.

Drawing Objections

The Office Action objects to the drawings as not showing a first semiconductor region enclosed in a second semiconductor region having a second conductivity type. Applicant respectfully disagrees. Applicant notes that Figure 2A depicts an upper well region 204 as a semiconductor region having the first conductivity type enclosed in a lower well region 202 as a semiconductor region having a second conductivity type different from the first conductivity type. *See, also,* Specification, page 7, line 27 through page 8, line 19. Figure 2A is a cross-sectional view of a structure suitable for use in fabricating the floating-gate memory cells in accordance with one embodiment of the invention. Applicant thus respectfully submits that the drawings do show the features identified by the Examiner. In light of the foregoing, Applicant requests that the objection to the drawings be withdrawn.

Rejections Under 35 U.S.C. § 103

Claims 1, 2, 10-14, 16-18, 23-25, 28-29, 31-35, 38, 39, 41-46, 48, 54, 58, 61-62 and 64-65 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Choi (U.S. Patent 6,215,158) in view of Wang (U.S. Patent 5,553,018).

The Office Action identifies Choi's upper p-tub region 121 as corresponding to Applicant's first semiconductor region having a first conductivity type and Choi's interconnect layer 130 as corresponding to Applicant's second semiconductor region having a second conductivity type. *See* Office Action, page 3, second paragraph.

Claim 1 is amended to recite, in part, "wherein the second semiconductor region isolates the first semiconductor region from other semiconductor regions having the first conductivity type." Applicant notes that Choi's interconnect layer 130 is purported to not be a solid layer. Choi, column 3, lines 19-22. Accordingly, Choi's interconnect layer 130 cannot isolate its upper p-tub region 121 from other regions of the same conductivity type. The secondary reference of Wang et al. fails to overcome this deficiency of the Choi reference. Applicant thus submits that claim 1 as amended is patentably distinct from the cited references, either alone or in combination.

Claim 13 recites, in part, "wherein the first semiconductor region is enclosed in a second semiconductor region having the second conductivity type." As noted above, Choi's interconnect layer 130 is not a solid layer and therefore cannot enclose the upper p-tub region 121. Accordingly, Applicant submits that claim 13 is patentably distinct from the cited references, either alone or in combination.

Claim 14 recites, in part, "a source-line contact extending from the source region to a lower well region " and "wherein the upper well region is formed in the lower well region." As noted above, Choi's interconnect layer 130 is not a solid layer and therefore cannot be considered a well region as that term is used in Applicant's Specification and claims. Accordingly, Applicant submits that claim 14 is patentably distinct from the cited references, either alone or in combination.

Remaining independent claims are patentably distinct from the cited references for similar reasoning. Claim 16 recites, in part, "wherein the source region is coupled to a lower well region underlying the upper well region and having the second conductivity type." Claims 25 and 31 recite, in part, "a lower well region in the substrate, wherein the lower well region has a second conductivity type different from the first conductivity type" and "an upper well region in the lower well region, wherein the upper well region has the first conductivity type." Claim 32 recites, in part, "a first well region, wherein the first well region has the first conductivity type" and "a second well region interposed between the substrate and the first well region, wherein the second well region has a second conductivity type different from the first conductivity type." Claim 33 recites, in part, "a first well region, wherein the first well region has the first conductivity type," "a

second well region interposed between the substrate and the first well region, wherein the second well region has a second conductivity type different from the first conductivity type," "a third well region, wherein the third well region has the first conductivity type and wherein the third well region is isolated from the first well region" and "a fourth well region interposed between the substrate and the third well region, wherein the fourth well region has the second conductivity type." Claim 41 recites, in part, "a well region having a first conductivity type, wherein the well region having the first conductivity type is isolated from a semiconductor substrate having the first conductivity type by an interposing well region having a second conductivity type different from the first conductivity type." Claims 44, 45 and 46 recite, in part, "wherein the p-well is enclosed in an n-well formed in a p-type semiconductor substrate." Claim 54 recites, in part, "a source region in the upper well region and having the n^+-type conductivity, wherein the source region is coupled to a lower well region underlying the upper well region." Claim 58 recites, in part, "a lower well region formed in the substrate, wherein the lower well region has an n-type conductivity" and "an upper well region formed in the lower well region, wherein the upper well region has the p-type conductivity." Claim 64 is amended to recite, in part, "wherein the second semiconductor region isolates the first semiconductor region from other semiconductor regions having the first conductivity type." Claim 65 recites, in part, "a lower well region in the substrate, wherein the lower well region has a second conductivity type different from the first conductivity type" and "an upper well region in the lower well region, wherein the upper well region has the first conductivity type."

In view of the above, Applicant respectfully submits that independent claims 1, 13, 14, 16, 25, 31-33, 41, 44-46, 54, 58, 64 and 65 are patently distinct from the cited references taken either alone or in combination. As the remaining rejected claims depend from and further define one of the independent claims, these claims are also believed to be allowable. Applicant thus respectfully requests reconsideration and withdrawal of the rejection under 35 U.S.C. § 103(a), and allowance of claims 1, 2, 10-14, 16-18, 23-25, 28-29, 31-35, 38, 39, 41-46, 48, 54, 58, 61-62 and 64-65.

Generic Claims

Claims 3-9, 15, 19-22, 26, 27, 30, 36, 37, 40, 47, 49-53, 55-57, 59, 60 and 63 were withdrawn as directed to non-elected species. Applicant asserted that the elected claims were generic to the non-elected species. As Applicant believes that generic claims are in condition for allowance, Applicant contends that it is entitled to consideration of claims to the other species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. Applicant thus requests that claims 3-9, 15, 19-22, 26, 27, 30, 36, 37, 40, 47, 49-53, 55-57, 59, 60 and 63 be reinstated and allowed.

CONCLUSION

Claims 1 and 64 are amended herein. Claims 1, 2, 10-14, 16-18, 23-25, 28-29, 31-35, 38, 39, 41-46, 48, 54, 58, 61-62 and 64-65 are pending. Claims 3-9, 15, 19-22, 26, 27, 30, 36, 37, 40, 47, 49-53, 55-57, 59, 60 and 63 are requested for reinstatement.

In view of the above remarks, Applicant respectfully submits that the claims are in condition for allowance and requests reconsideration of the application and allowance of the claims. No new matter has been added and no additional fee is required by this amendment and response.

The Examiner is invited to contact Applicant's representative at direct dial (612) 312-2204 if there are any questions regarding this response or if prosecution of this application may be assisted thereby.

Respectfully submitted,

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